



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS ARNOLD ENGINEERING DEVELOPMENT CENTER (AFMC)
ARNOLD AIR FORCE BASE TENNESSEE

13 December 2016

AEDC/TSDC
100 Kindel Drive, Ste B-322
Arnold AFB TN 37389-2322

Ms. Sherry Glass
Tennessee Department of Environment and Conservation
Division of Water Resources
Columbia Environmental Field Office
1421 Hampshire Pike
Columbia TN 38401

Dear Ms. Glass

This letter serves as the Arnold Engineering Development Complex (AEDC) response to your 18 November 2016 Notice of Violation (NOV) for State Operating Permit No. SOP-06006. The NOV was issued due to wastewater ponding on the drip field and two instances of exposed disposal pipe. It was also noted that instances of ponding or pooling of wastewater under dry conditions must be promptly investigated and remedied and also noted on the quarterly operation report.

AEDC has completed an extensive inspection of the drip field to identify areas which contributed to the issuance of the NOV. Ten actions have been identified which address the findings and ensure AEDC remains in compliance with the State Operating Permit. Five of these actions have been completed. The remaining five are procedural actions aimed at strengthening AEDC's efforts to maintain compliance with SOP-06006. The Action Plan, which addresses the NOV inspection findings, is attached for your review. In addition, the bi-weekly inspection form has been modified and additional training has been provided to ensure any future issues are promptly identified and resolved.

Please contact Mr. Trung Le at (931) 454-5873 if you have any questions, or if the actions described in the attachment are insufficient to close the NOV.

Sincerely


JOHN W. LAVIOLETTE, NH-04, USAF
Base Civil Engineer

Attachment: Action Plan – Notice of Violation for SOP-06006

Action Plan

Notice of Violation for Arnold Village Wastewater System

State Operating Permit No. SOP-06006

A preliminary inspection of the area was conducted on November 22, 2016 to establish the extent of violations as identified by the November 10, 2016 inspection performed by the State of Tennessee Division of Water Resources. Actions taken to address the findings noted in the NOV are outlined below:

Actions completed:

- Initial system inspection performed indicates that the control system, sand filter and dispersal system are operating as designed.
- Zones 1 and 4, areas of ponding water have been temporarily deactivated in the program to allow these areas to dry.
- Depressed areas with ponding water and exposed dispersal lines have been backfilled with topsoil, using small low ground pressure equipment. Seed and straw have been applied.
- Cease use of heavy tractors for mowing operations and change to lower ground pressure mowers. The depressed areas with ponding water were ruts caused by heavy tractors mowing the dispersal field.
- Bi-Weekly inspection log for the permitted area has been reviewed and updated to ensure all permit requirements are being followed. Training for all operators has been updated to ensure full understanding of the inspection requirements.

Ongoing Procedural Actions:

- Carefully monitor all active zones in leach field bi-weekly to ensure none become over-saturated. Check for signs of broken force mains or damaged dispersal lines.
- Perform bi-weekly operational inspections of the leach field. Record any discrepancies on "Bi-Weekly Inspection Log for the Arnold Village Recirculating Sand Filter/Drip Field" (attached). Mark all discrepancies found in the leach field with flags and note location on log sheet. All discrepancies should be reported to supervision and engineering and work orders initiated. Corrective actions will be prioritized and monitored through completion.
- Evaluate any excessive water surfacing and excavate lines to make repairs if needed.

- Perform regular evaluations and maintenance of sand filter and dispersal system per Original Equipment Manufacturer recommendations to ensure proper operation. This will be set up in the AEDC preventive maintenance program.
- Monitor leach field bi-weekly to ensure that the grass height is maintained to 6 – 12". Note on discrepancy log of areas that need to be seeded to maintain sufficient ground cover.

Bi-Weekly Inspection Log for the Arnold Village Recirculating Sand Filter / Drip Field
State Operating Permit Number SOP-06006

Date							
Time							
Name of Inspector							
Condition of Treatment Facility Security Controls (doors, fencing, signage, gates, etc.)							
Condition of Drip Area Security Controls (doors, fencing, signage, gates, etc.)							
Condition of Drip Lines Under Pressure							
Condition of the Drip Area Including the Location of any Ponding							
Height of Cover Crop, Inches							
Condition of the Mechanical Parts of the Treatment System (pumps, filters, etc.)							
Description of Corrective Actions							
Additional Comments							